

REMARKS/ARGUMENTS

Favorable reconsideration of this application, as presently amended and in light of the following discussion, is respectfully requested.

Claims 1-10, 12, 13, 15, 17-28, and 33-44 are pending in this application. Claims 1, 19, 23, and 33 are amended, and Claims 34-44 are added by the present amendment.

Amendments to the claims find support in the application as originally filed, at least at Applicants' Figure 12, and in the specification at page 18, line 30, to page 19, line 20. Thus, no new matter is added.

In the outstanding Office Action, Claims 1, 2, 4, 5, 7, 8, 10, 12, 13, 15, 17, 18, 23, 26-28, and 33 were rejected under 35 U.S.C. § 103(a) as unpatentable over U.S. Patent 6,990,238 to Saffer et al. (herein "Saffer") in view of Xia Lin, et al., "A Self-Organizing Semantic Map ..." (herein "Lin"); Claims 3, 6, 9, 19, 20, 24, and 25 were rejected under 35 U.S.C. § 103(a) as unpatentable over Saffer in view of Lin and U.S. Patent No. 6,446,061 to Doerre et al. (herein "Doerre"); and Claims 21 and 22 were rejected under 35 U.S.C. § 103(a) as unpatentable over Saffer in view of Lin, Doerre, and U.S. Patent 5,977,992 to Branscomb.

Initially, Applicants gratefully acknowledge the courtesy of a personal interview with Examiner Daye on November 5, 2008. During the interview, differences between the claims and references in the outstanding Office Action were discussed. Comments discussed during the interview are reiterated below.

Applicants respectfully traverse the rejection of Claims 1, 2, 4, 5, 7, 8, 10, 12, 13, 15, 17, 18, 23, 26-28, and 33 under 35 U.S.C. § 103(a) as unpatentable over Saffer and Lin.

Claim 1 is directed to an information retrieval apparatus that includes, in part, a mapping processor and a display processor. When viewing a first cluster in one of the hierarchical levels within a display area of a graphical display, the display processor is operable to generate data which is displayed as a direction indicating symbol on the graphical

user interface. The direction indicating symbol provides a user with a relative direction within the n-dimensional display of the location of a second cluster with a same hierarchical level as the first cluster. The second cluster is located outside the display area. Independent Claims 19, 23, and 33 include similar features directed to different classes and scopes of invention.

Applicants' Figure 12 shows a non-limiting example of an embodiment of Claim 1. In this example, a 2-dimensional display area 430 (e.g., an n-dimensional display) shows locations QUIZ, DIY, GAME, and HORROR clusters each at a same hierarchical level H_LEVEL 1. A display area 440 includes a zoomed-in view of the QUIZ cluster (e.g., a first cluster in one of the hierarchical levels) and a direction indicating symbol 444. The direction indicating symbol 444 provides a user with a relative direction within the n-dimensional display (e.g., display area 430) of the location of the GAME cluster (e.g., a second cluster at the same hierarchical level as the QUIZ cluster and located outside the display area 440).

As discussed during the interview, Saffer and Lin, whether taken individually or in combination, fail to teach or suggest a direction indicating symbol providing a user with a relative direction within an n-dimensional display area of a location of a second cluster within a same hierarchical level as the first cluster. For example, Saffer indicates that a visual tool for viewing information is a "galaxy view" that is a "two dimensional scatter graph in which records are organized and depicted in groups (or 'clusters') based on relationships between one record and another."¹ In other words, Saffer only indicates that clusters may be displayed in a "galaxy view," and as discussed during the interview and as stated in the Office Action,² Saffer fails to suggest a direction indicating symbol that indicates a relative direction to a second cluster.

¹ Saffer at column 20, lines 58-64.

² Office Action at page 4, lines 7-9.

In addition, as discussed during the interview, Lin fails to supply the claimed features lacking in the disclosure of Saffer. For example, Lin Fig. 4(a) shows “a self-organizing semantic map trained by the data in the system”³ that includes arrows pointing left and right. However, as discussed during the interview, Lin fails to indicate or otherwise suggest the function of these arrows. Further, as discussed during the interview, Lin fails to indicate or otherwise suggest that the arrows pointing left and right provide a relative direction of a location of another cluster. As discussed during the interview, because the function of the arrows pointing left and right is not disclosed or suggested by Lin, it is merely improper hindsight reasoning to assert that the arrows pointing left and right provide a user with a relative direction to a cluster. Further, as discussed during the interview, it is not inherent that the arrows pointing left and right provide a relative direction to another cluster, at least because there are many other possible purposes for the arrows. For example, the arrows pointing left and right may simply select a different one of the tabs (e.g., KEYWORDS, AUTHORS, and TITLES) show in the top of the figure.

Moreover, even assuming *arguendo* (and incorrectly) that the arrows pointing left and right in Lin are links to displays of additional clusters, for example, another page of clusters, there is no teaching in Lin to suggest that such a display of additional clusters would include a second cluster within a same hierarchical level as a first cluster.

Furthermore, as discussed during the interview, it is also improper hindsight reasoning to assert that the arrows pointing left and right in Lin provide a user with “a relative direction within the n-dimensional display of the location of a second cluster,” as required by the independent claims. For example, Lin fails to indicate that Fig. 4(a) shows clusters have a “next” or “previous” location relationship with one another. Thus, Lin also does not teach or otherwise suggest that “next” or “previous” is a “relative direction within

³ Lin at numbered section 4, second paragraph.

the n-dimensional display of the location of a second cluster.” Accordingly, it is respectfully submitted that Lin also fails to teach or suggest that the left and right arrows provide a user with such a “relative direction within the n-dimensional display of the location of a second cluster,” as required by the independent claims.

Accordingly, Applicants respectfully submit that Saffer and Lin, whether taken individually or in combination, fail to teach or suggest “the display processor is operable to generate data which is displayed as a direction indicating symbol on the graphical user interface providing a user with a relative direction within the n-dimensional display of the location of a second cluster within a same hierarchical level as the first cluster,” as required by independent Claim 1, and as similarly recited by independent Claims 19, 23, and 33.

Accordingly, Applicants respectfully submit that independent Claims 1, 19, 23, and 33, and claims depending therefrom, patentably define over Saffer and Lin.

In addition, Applicants respectfully traverse the rejections of Claims 3, 6, 9, 19-22, 24, and 25 under 35 U.S.C. § 103(a) as unpatentable over Saffer in view of Lin and Doerre or Branscomb.

Claims 3, 6, 9, 19-22, 24, and 25, depend from independent Claims 1, 19, 23, and 33, which as discussed above are believed to patentably define over Saffer and Lin. Further, it is respectfully submitted that Doerre and Branscomb fail to teach or suggest the claimed features lacking in the disclosures of Saffer and Lin.

Accordingly, it is respectfully requested the rejections of Claims 3, 6, 9, 19-22, 24, and 25 under 35 U.S.C. § 103(a) also be withdrawn.

New dependent Claim 34 is added to recite the apparatus of Claim 1, wherein the display processor is further configured to generate data which is displayed on the graphical user interface as a keyword associated with the corresponding second cluster. Independent Claims 35-37 include similar features or related steps depending from independent Claims

19, 23, and 33, respectively. Applicants respectfully submit that Saffer and Lin also fail to teach or suggest the features of new Claims 34-37. Thus, it is respectfully submitted that Claims 34-37 are allowable for that separate reason in addition to the reasons noted above with respect to the independent claims.

New dependent Claim 38 is added to recite the apparatus of Claim 1, wherein all of the display points in the display area of the graphical display are included in the first cluster. For example, in the non-limiting embodiment of Applicants' Figure 12, view 440 (e.g., display area) is a "zoom" view of the QUIZ cluster (e.g., the first cluster) and all of the display points in the display area are included in the QUIZ cluster (e.g., the first cluster). Claims 39-41 include similar features or related steps depending from independent Claims 19, 23, and 33, respectively.

Applicants respectfully submit that Saffer and Lin also fail to teach or suggest the features of new Claims 38-41. Thus, it is respectfully submitted that Claims 38-41 are allowable for that separate reason in addition to the reasons noted above with respect to the independent claims.

In addition, new independent Claim 42 is added to recite an information retrieval apparatus that includes, in part, a display processor configured to display, within a graphical user interface, a first display area including each of the second hierarchical clusters arranged based on the positions in the array of the second hierarchical clusters, and a second display area displayed within the graphical user interface including information items associated only with one of the second hierarchical clusters and direction indicating symbols for each of the other second hierarchical clusters. Each of the direction indicating symbols indicates a relative array direction in the first display area from the one of the second hierarchical clusters to a corresponding one of the other second hierarchical clusters. New independent

Claims 43-44 include similar features or steps directed to different classes and scopes of invention.

Applicants respectfully submit that Saffer and Lin also fail to disclose, teach, or suggest each of the features of any of independent Claims 42-44. For example, as discussed during the interview, Saffer and Lin fail to teach or suggest a first display area including *each of* second hierarchical clusters that are included in a first hierarchical cluster, Saffer and Lin fail to teach or suggest a second display area including information items associated only with one of the second hierarchical clusters, Saffer and Lin fail to teach or suggest the second display area including direction indicating symbols that indicate relative array directions *in the first display area*, and Saffer and Lin fail to teach or suggest the second display area including direction indicating symbols for *each of the other second hierarchical clusters* that are included in the first hierarchical cluster.

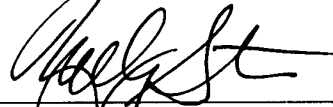
Accordingly, Applicants respectfully submit that independent Claims 42-44 also patentably define over Saffer and Lin.

Therefore, Applicants respectfully submit that independent Claims 1, 19, 23, 33, and 42-44, and claims depending therefrom, are allowable.

Consequently, in light of the above discussion and in view of the present amendment, this application is believed to be in condition for allowance and an early and favorable action to that effect is respectfully requested.

Respectfully submitted,

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